

REMARKS

Claims 88-117 are pending in the present application and at issue. Claims 88, 91, 96, 102 and 106 are currently amended. Claim 98 is cancelled.

It is respectfully submitted that the present amendments and remarks present no new matter and places this case in condition for allowance. Reconsideration of the application in view of the amendments, remarks and terminal disclaimer submitted herewith is requested.

I. Sequence Rule Compliance

The Office objected to the sequence listing for lack of a statement of sameness. Applicants enclose a paper copy and a computer readable form of the Sequence Listing which contains these sequences. The content of the paper copy and of the computer readable form is the same. A statement under 37 CFR 1.821(f) is submitted herewith for the Examiners consideration.

Please note that FIG. 1 is a partial alignment of a number of subtilases from amino acid residue 127 to 201. The specification has been further amended to clarify FIG.1 and specifically to show that FIG. 1 includes dashes to show optimal alignment of the sequences. Further, FIG. 1 has been further clarified by amending the specification to specifically reference each SEQ ID NO. in FIG. 1.

For the foregoing reasons, Applicants submit that this objection has been overcome. Applicants respectfully request reconsideration and withdrawal of the objection.

II. The Objection to Claims 96, 98, 102 and 106

The Office objected to claims 96, 98, 102 and 106. Claims 96, 102 and 106 have been amended. Claim 98 has been canceled. Reconsideration is urged.

III. The Rejections under the Doctrine of Obviousness-Type Double Patenting

Certain claims are rejected under the doctrine of obviousness-type double patenting as being unpatentable over the patents issued from the parent applications, namely U.S. Patent Nos. 5,837,517 (docket no. 4322.200), 6,190,900 (docket no. 4322.210) and 6,682,924 (docket no. 4322.220). A terminal disclaimer is submitted herewith. Reconsideration is urged.

IV. The Rejections under the Doctrine of Obviousness-Type Double Patenting

Certain claims are rejected under the doctrine of obviousness-type double patenting as being unpatentable over the following applications and patents:

1. U.S. Patent No. 5,631,217 (docket no. 3470.210)

2. U.S. Patent No. 5,741,694 (docket no. 3160.230),
3. U.S. Patent No. 6,110,884 (docket no. 3957.524), and
4. U.S. Patent No. 6,808,913 (docket no. 3160.240).

These rejections are respectfully traversed.

None of these patents and applications claim the modified subtilases recited in independent claims 88, 96, 102, 106, 110, or 114. Applicants therefore submit that these rejections have been overcome.

VI. The Rejections under the Doctrine of Obviousness-Type Double Patenting

Certain claims are rejected under the doctrine of obviousness-type double patenting as being unpatentable over the following patents:

1. U.S. Patent No. 6,555,355 (our docket no. 5349.204),
2. U.S. Patent No. 6,558,938 (our docket no. 5348.200),
3. U.S. Patent No. 6,605,458 (our docket no. 5435.200),
4. U.S. Patent No. 6,773,907 (our docket no. 5435.400),
5. U.S. Patent No. 6,780,629 (our docket no. 5435.410-US),
6. U.S. Patent No. 6,893,855 (our docket no. 10081.200),
7. U.S. Patent No. 6,921,657 (our docket no. 5349.214),
8. U.S. Patent No. 7,026,153 (our docket no. 5435.210),
9. U.S. Patent No. 6,777,218 (our docket no. 6137.200).

With respect to U.S. Patents Nos.: 6,555,355, 6,558,938, 6,605,458, 6,773,907, 6,780,629, 6,893,855, 6,921,657, 7,026,153, 6,777,218 the two-way test to determine obvious type double patenting applies when cited patents or applications are later filed (see, *inter alia*, section 804 of the Manual of Patent Examining Procedures). Applicants respectfully submit that in Applicants' Response to the Official Action dated February 27, 2006, Applicants erroneously stated that the one-way test applies to determine obvious type double patenting. In any event, the two-way test to determine obvious type double patenting is appropriate in this case because the improvements were not made until after the present application was filed.

The court in *Braat*, however, emphasized the more typical scenario in which, despite common inventive entities, the two-way test applied: "when a *later-filed improvement* patent issues before an *earlier filed basic invention*." *Id.* (emphasis added); accord *Borah*, 345 F.2d at 1009, 148 USPQ at 214 (allowing the earlier filed but later allowed basic patent application to issue without a terminal disclaimer because the two

applications could not have been filed as one since the improvements were not made until after the application on the basic invention was filed); see also Calvert, 97 F.2d at 640, 38 USPQ at 185 (allowing an earlier filed patent application for generic invention to issue without a terminal disclaimer after a later filed improvement patent).

In Re Berg, 46 USPQ2d 1226, 1230-1231 (CAFC 1998).

Applicants respectfully submit that the instant case is distinguishable from *Berg* where the application of the two-way test was denied. In *Berg*, two almost exactly alike disclosures were simultaneously filed with the USPTO. The Federal Circuit stated that it was appropriate to deny the two-way test “because Berg could have filed the claims of its separate applications in a single application, and it simply chose to file two applications despite nearly identical disclosures.” *In Re Berg* at 1230. Thus, the Berg Applicant should have included all claims in one application. Conversely, in the present case, Applicants could not avoid separate filings and the applications had to be filed at different times because the improvements were not made until after the application of the present disclosure was filed (effective May 6, 1996).

The instant application was filed on July 14, 2003 as a continuation of U.S. Application No. 09/587,747, file on June 5, 2000, now U.S. Patent No. 6,682,924, which is a continuation of U.S. Application No. 09/120,577, filed on July 22, 1998, now U.S. Patent No. 6,190,900, which is a continuation of U.S. Application No. 08/642,987, filed May 6, 1996, now U.S. Patent No. 5,837,517. Thus the earliest effective U.S. filing date of the present disclosure is May 6, 1996. All of the cited patents (Nos. 1-9 in the above) were filed after May 6, 1996, thus came after the present disclosure was filed. Therefore, under the two-way test, the Examiner must also ask whether the patent claims are obvious over the application claims. If not, the application claims may later be allowed. See *Berg* 46 USPQ2d at 1229. As all of the cited U.S. patents (Nos. 1-9 above) are presumptively valid pursuant to 35 U.S.C. § 282 and subject to a general presumption, that they were regularly and properly granted pursuant to law, the patent claims are presumably not obvious over the application claims. For these reasons, the claims of the cited patents are not obvious over the claims of the instant application, and the rejection under the doctrine of obviousness-type double patenting should be withdrawn. As the rejection was improper, no terminal disclaimer need be submitted.

Finally, under sections 804 and 822.01 of the Manual of Patent Examining Procedures, if a provisional double patenting rejection in one application is the only rejection remaining in that

application, that rejection should be withdrawn and the provisional double patenting rejection in the other application be converted into a double patenting rejection. In accordance with this practice, Applicants request that the obviousness-type double patenting rejection based on U.S. Application Nos. 09/931,701, 09/948,080, 10/314,191, 10/699,394, and 10/884,325 be withdrawn in the present application.

VII. The Rejections under 35 U.S.C. 102 and 103

Claims 88, 91, 95, 91, 102, and 105 are rejected under 35 U.S.C. 102(e) as being anticipated by Rasmussen et al. (U.S. Patent No. 6,110,884). Claims 93, 94, 99, 100, 103 and 104 are rejected under 35 U.S.C. 103 as being obvious in light of Rasmussen et al. (U.S. Patent No. 6,110,884) over Branner et al., (U.S. Patent No. 5,482,849). The cited references disclose modified subtilases. However, none of these references disclose or suggest the modified subtilases recited in the claims as amended herein. Applicants therefore submit that these rejections have been overcome.

VIII. Conclusion

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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